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ECONOMIC GROWTH AND INDUSTRIAL RESTRUCTURING IN JAPAN

Summary

In the fall of 1985 Prime Minister Yasuhiro Nakasone established a panel of advisers to recommend changes in Japan's economy that would reduce its large trade surplus and lessen friction with other countries. The commission, chaired by former Bank of Japan governor Haruo Maekawa, submitted a report last April calling for an industrial restructuring. It advocated shorter working hours and higher wages, financial liberalization, improved market access for imports, more housing construction, an end to the tax exemption on interest from small savings accounts, and a rapid increase in foreign direct investment. A second committee, also chaired by Mr. Maekawa, is working on specific proposals.

Economic restructuring carries the threat of a rise in unemployment, which has become a major issue in Japan since the yen's appreciation. With industrial production and export volume falling, a Ministry of International Trade and Industry report issued in November called the employment situation in the manufacturing sector the most serious in the postwar era. Economic Planning Agency analysts calculate that 4 percent real economic growth is a prerequisite for the restructuring of Japan's economy. Since the 1973 oil shock, this has been the average rate, but it will be difficult for Japan to achieve 4 percent real growth during the next five years while reducing both the trade surplus and the government budget deficit.

Concern Over Rising Unemployment

Japan has successfully avoided many of the economic problems that have plagued other industrialized countries since the first oil shock. From 1974 to 1985, Japan's unemployment rate averaged 2.2 percent, compared to 5.1 percent in West Germany and 7.5 percent in the United States (see Table 1). At the same time, its inflation rate was below the average for the major industrialized countries.

Table 1: Unemployment and Inflation in Industrialized Countries, 1975-85

(average annual rate)

	Unemployment Rate	Consumer Price Increase
United States	7.5%	7.4%
Japan	2.2	5.3
West Germany	5.1	4.2
France	6.7	10.2
United Kingdom	8.5	12.0
Italy	8.1	15.3
Canada	8.8	8.4
Weighted Average	6.3	7.7

Source: Organization for Economic Cooperation and Development

Part of the explanation for Japan's comparatively low jobless rate is statistical. U.S. figures include all those who are out of work for a month; Japan limits its definition to those receiving unemployment insurance. In addition, Tokyo excludes laid-off workers because they continue to receive part of their wages. In Japan, moreover, military personnel and those working more than one hour a week are counted as employed, while armed forces personnel and those working less than 15 hours a week are not considered part of the labor force in this country. If Japan's unemployment rate were calculated using the U.S. definition, the Ministry of International Trade and Industry estimates that it would be over 5 percent rather than the 2.8 percent reported in October. Still, it compares favorably with the U.S. rate, which stood at 7 percent in November.

Many politicians and business leaders, though, are alarmed at the situation. The manufacturing sector in October employed 230,000 fewer people than a year ago, with job losses concentrated in smaller firms. Those with under 30 workers employed 80,000 fewer employees, while medium-sized companies (30 to 499 workers) cut back 60,000.

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Moreover, many economists expect Japan's unemployment rate to rise in the future. A study by the Sanwa Research Institute estimates that 900,000 of the 14.4 million people employed in the manufacturing sector are surplus workers. Another report predicts that the increase in foreign direct investment between FY 1983 and FY 2000 will cost Japan 600,000 jobs. Not surprisingly, the Japan Economic Research Center forecasts a 4.2 percent unemployment rate in FY 1991. In response, the government has established an office to cope with the problem. Meanwhile, Eishiro Saito, chairman of Keidanren, has called on the government to include effective measures against unemployment in its FY 1987 budget.

As the industrial restructuring continues, other sectors of Japan's economy must expand to replace jobs lost in manufacturing and prevent a serious rise in unemployment. Last month, Tetsuo Kondo, director general of the Economic Planning Agency, warned that "industrial and economic structural adjustments are possible only if we can achieve real growth of about 4 percent." Although that rate is in line with the 4.2 percent average from 1974 to 1985, it will be a difficult pace to maintain for two reasons. First, the reduction of Japan's trade surplus, which is estimated at $85 billion in 1986, will exert a significant drag on the economy. Second, the commitment to end the issue of deficit-financing bonds by FY 1990 limits the government's ability to adjust fiscal policy to boost the economy.

Table 2: Japan's Real Gross National Product, 1980 and 1985

(in billions of yen at constant 1980 prices)

	FY 1980	FY 1985	Average Annual Growth
Gross National Product	Y242,130.9	Y293,332.7	3.8%
Personal Consumption Spending	141,397.8	162,999.0	2.8
Private Residential Construction	15,114.2	14,107.9	-1.4
Private Fixed Nonresidential Investment	38,293.4	53,760.3	6.8
Change in Business Inventories	2,096.9	2,016.2	-0.8
Government Current Expenditures	23,755.6	27,240.9	2.7
Government Fixed Investment	23,153.9	20,772.5	-2.2
Change in Government Inventories	-274.3	297.9	*
Net External Sector	-1,406.6	12,138.1	*
Exports of Goods and Services and Factor Income Received	36,688.9	54,496.6	7.9
Imports of Goods and Services and Factor Income Paid	38,095.5	42,358.6	2.1

*Cannot be calculated or meaningless.

Source: Economic Planning Agency

Net exports have provided a major boost to Japan's economy, accounting for over one-fourth of the 21 percent rise in real GNP between FY 1980 and FY 1985 (see Table 2). The contraction of the trade surplus in coming years will have an equally powerful negative effect. Japan has already had a taste of this effect as net exports have now declined for five consecutive quarters. Assuming net exports return to balance, 4 percent real annual growth implies that domestic demand will have to increase Y91,704.3 billion ($573 billion at Y160=$1.00) by 1991. If government spending continues to grow at its FY 1980 to FY 1985 real yearly pace of 0.7 percent, private domestic demand will have to increase at an inflation-adjusted 5.4 percent annual rate -- a sharp step-up from the 3.4 percent a year rate during the first half of the 1980s.

Growth at that level, of course, would not be unprecedented in Japanese economic history. Between 1965 and 1973, private domestic demand rose at an inflation-adjusted 9.7 percent annual rate, exceeding the 9.0 percent growth of GNP. But is real growth in private investment and consumption of over 5 percent feasible in the stable growth era? The answer depends, in part, on whether the end of high growth in 1973 was the result of a change in government policies or of underlying economic trends.

A New High Growth Era?

Edward Denison and William Chung's chapter in Asia's New Giant identifies the increase in Japan's capital stock resulting from its high investment rate as the key factor explaining the robust growth of the 1960s and early 1970s. Private investment in plant and equipment, however, which had grown 14.0 percent annually in real terms from 1965 to 1973, fell to a 4.1 percent a year rate during the following 12 years. As a share of GNP, it dropped from 17.7 percent in 1973 to 14.3 percent in 1978. The sharp decline in investment growth following the first oil shock, therefore, is one explanation of the slowdown.

One possible reason for the scaled-back expansion of capital spending was a shift in priorities in the early 1970s. Tokyo made a conscious decision to improve the quality of life through increased expenditures on social infrastructure and pollution control. This decision produced more roads, better sewage facilities and an improvement in environmental quality. Moreover, greater resources were channeled into housing. As a result of the increase in government spending, the budget swung from a surplus equivalent to 1.8 percent of GNP in 1970 to a deficit equal to 5.5 percent in 1978.

Rising budget deficits during the 1970s crowded out private investment in many countries, slowing economic growth. This does not appear to have been the case in Japan, given the country's high saving rate. Even at the deficit's peak in 1978, domestic savings exceeded private investment and the budget deficit by an amount equivalent to 1.7 percent of GNP. Government red ink merely stepped in to fill the gap resulting from the investment decline. Moreover, it can be argued, the resulting improvement in living standards added to economic growth.

Edward Lincoln of The Brookings Institution emphasizes the importance of the technological gap between Japan and other countries in encouraging

investment during the high growth period. Japan's ability to absorb and adapt foreign technology made large jumps in productivity possible, raising the expected profits from investment in new plant and equipment. But as the country advanced, the technological gap narrowed and had largely disappeared by the mid-1970s, according to some estimates. This forced Japanese firms to undertake their own research and development, a more costly approach that lowered the return on investment. Dr. Lincoln also points out that the benefits of economies of scale were largely exhausted by the mid-1970s.

The slowdown in growth is also a result of changes in labor inputs. The expansion of the labor force slowed from a 1.3 percent annual rate in the 1960-73 period to only 0.9 percent a year from 1973 through 1985 (see Table 3). The decline reflects the slower rate of population increase as well as a small drop in the labor force participation rate. More importantly, the shift of labor from low productivity activities in agriculture to higher productivity jobs in manufacturing and services was largely completed by 1973. In 1965 workers in the primary sector accounted for 23.5 percent of total employment but produced only 11 percent of gross domestic product (see Table 4). The productivity of manufacturing workers, who accounted for about the same share of the labor force but produced over one-fourth of gross domestic product, was more than double that of workers in the primary sector. Service sector employees were also substantially more productive than those in agriculture, forestry and fishing.

Table 3: Labor Force Statistics

Year	Labor Force (in millions)	Labor Force Participation Rate	Unemployment Rate	Monthly Hours Worked
1960	45.1	69.2%	1.7%	202.7
1965	47.9	65.7	1.2	192.9
1970	51.5	65.4	1.1	186.6
1973	53.3	64.7	1.3	182.0
1975	53.2	63.0	1.9	172.0
1980	56.5	63.3	2.0	175.7
1985	59.6	63.0	2.6	175.8

Source: Management and Coordination Agency, Japan Statistical Yearbook

By 1973 the share of total employment in the primary sector had dropped 10 percentage points, a shift of more than half a million workers a year on average, although of course some retired rather than take jobs in manufacturing or services. The transfer provided a major boost to economic growth. From 1973 to 1985, though, the primary sector's share of workers fell at a slower rate; the 4.6 percentage points drop represents a shift of only 160,000 a year on average.

Table 4: Employment by Sector*

(percentage distribution)

Year	Primary	Secondary	Tertiary	Total Employment (in millions)
1965	23.5%	31.9%	44.6%	47.3
1970	17.4	35.2	47.3	50.9
1973	13.4	36.6	49.8	52.6
1975	12.7	35.2	51.9	52.2
1980	10.4	34.8	54.6	55.4
1985	8.8	34.3	56.9	58.1

*The primary sector includes workers in agriculture, forestry and fisheries, while the secondary sector covers manufacturing, mining and construction. The tertiary sector includes workers in the service sector, government and utilities.

Source: Management and Coordination Agency, Japan Statistical Yearbook

The economy's slower pace is also a reflection of smaller gains in the volume of exports. Although net exports have made a significant contribution to GNP in some years, the 8.1 percent annual expansion in export volume since 1973 is well below the 12.3 percent rate recorded from 1965 to 1973 (see Table 5). One reason has been the slowdown in the growth of Japan's trading partners. During the earlier period, world economic growth averaged an inflation-adjusted 4.8 percent annual rate. Since 1973, however, that rate has fallen to 2.7 percent. Second, as Japan's share of world exports doubled from 5 percent in 1965 to 10 percent last year, political factors have constrained overseas shipments, including both protectionist barriers and "voluntary" self-restraint on Tokyo's part.

Table 5: Export and Import Volume

(1980=100)

Year	Export Volume	Import Volume	Trade Balance (billions of dollars)
1960	7.7	16.1	$0.3
1965	20.0	27.6	1.9
1970	39.8	61.5	4.0
1973	53.6	91.1	3.7
1975	64.4	79.4	5.0
1980	100.0	100.0	2.1
1985	142.3	109.5	56.0

Source: Japan Tariff Association

The sudden increase in oil prices in 1973 obviously had a negative effect on the economy. In addition to the transfer of income to oil exporters, Japan faced high adjustment costs. But while the oil shock provided a traumatic finale to the high growth era, it was not the major cause of its end. Japan's high rate of growth prior to 1973 was the result of temporary factors that were largely played out by the early 1970s.

Japan's Growth Potential

The determinants of economic growth are gains in labor productivity and changes in the growth of the labor force, total hours worked and the unemployment rate. An estimate of Japan's growth potential depends on assumptions about each of these four variables.

The government estimates that the working age population (15 to 64 years old) will increase at a 0.9 percent annual rate through 1990. The actual growth in the labor force depends on participation rates, which have remained practically constant during the past 15 years. The rate for women has been virtually unchanged since 1970, disguising a sharp increase in the 20-to-54 age bracket that has been offset by a decline in teenagers and the elderly (see Table 6). The female participation rate is likely to increase in coming years as more women choose either to remain in the labor force or return to it after marriage and children. This increase, though, is likely to be offset by a continuation of the sharp drop in participation by elderly men.

Table 6: Labor Force Participation Rates

(by age category)

Male

Year	15-19	20-24	25-34	35-44	45-54	55-64	65 and Over	Total
1970	31.4%	80.7%	97.4%	97.7%	96.5%	86.6%	49.4%	81.8%
1975	20.5	76.5	97.6	97.8	96.5	86.0	44.4	81.4
1980	17.4	69.6	97.0	97.6	96.3	85.4	41.0	79.8
1984	18.2	71.0	96.8	97.7	96.4	83.8	37.6	78.8

Female

Year	15-19	20-24	25-34	35-44	45-54	55-64	65 and Over	Total
1970	33.6%	70.6%	46.8%	60.1%	60.1%	44.4%	17.9%	49.9%
1975	21.7	66.2	43.2	56.9	59.8	43.7	15.3	45.7
1980	18.5	70.0	48.7	60.9	62.0	45.3	15.5	47.6
1984	18.5	72.4	52.1	63.7	64.1	45.0	15.9	48.9

Source: Management and Coordination Agency, Japan Statistical Yearbook

One of the reforms proposed by the Maekawa Commission is a reduction in the number of hours worked, which are high by international standards. Annual working hours per employee in 1985, for example, were about 1,947 in Japan compared to 1,742 in the United States and 1,535 in West Germany. Despite the government's efforts to promote the five-day work week, working hours have remained virtually unchanged since 1974 and there is unlikely to be any major decline in the near future.

Labor productivity is influenced by a variety of factors, including the level of the capital stock and the rate of technological innovation. Numerous methods are used to measure productivity, resulting in a variety of conflicting indices. The Japan Productivity Center reports that labor productivity in manufacturing has risen at an average rate of almost 4.3 percent since 1980. In contrast, Nomura Research Institute estimates that productivity gains in manufacturing averaged 3.2 percent from 1979 to 1984. Still, Japanese productivity is high compared to other countries according to either estimate. Former Council of Economic Advisers chairman Alan Greenspan estimates that "from 1981 through our projection for 1986, output per man-hour in the nonfarm business sector grew at an average annual rate of less than 1.2 percent" in the United States.

Based on optimistic assumptions that the labor force will grow at 0.9 percent a year and working hours will remain unchanged, productivity will have to increase at a 4.5 percent annual rate if domestic output is to expand by 5.4 percent a year -- the pace needed to meet the government's growth outlook while still reducing both the trade surplus and budget deficit. This outcome is certainly feasible -- the Japanese economy has demonstrated the ability to adapt to changing conditions in the past. But should productivity increase at the 3.2 percent rate calculated by Nomura, for example, growth will fall short of expectations. Moreover, it should be remembered that these projections are based on the results of the manufacturing sector, where productivity gains generally exceed those in services and agriculture.

Conclusion

Tokyo has identified three economic goals for the second half of the 1980s:

- Real economic growth of 4 percent, a rate considered necessary to permit a restructuring of the Japanese economy.
- A reduction in Japan's trade surplus, a source of growing international friction.
- An end to government reliance on deficit-covering bonds by FY 1990.

For the reasons outlined in the previous section, however, it will be difficult for the government to achieve all these objectives simultaneously during the next five years.

Regardless of official government plans, the high yen has already set in motion a restructuring of Japan's economy that is reducing industrial production and employment. One alternative is for the government to adopt a lower

growth target at the expense of a rise in unemployment. But it is likely that Tokyo's major priority will be to maintain economic growth through this period of adjustment and prevent a serious rise in unemployment. The goal of reducing Japan's record trade surpluses also cannot be easily abandoned. Although it cannot be completely eliminated by 1991, a significant reduction would reduce tension with trading partners and prevent protectionist measures.

The emphasis placed on reducing the government budget deficit reflects concern over the rising costs of servicing the public debt. Net interest payments will absorb over 20 percent of Japan's central government expenditures in 1986 compared to about 14 percent in this country. The central government debt to GNP ratio in 1985 was 52.1 percent in Japan versus 48.4 percent in the United States. Despite these concerns, however, it is likely that the first two goals will take priority should all three prove unattainable. Last week the influential business group Keidanren urged the government to boost public works spending by temporarily shelving its goal of eliminating the budget deficit.

For further information, contact Randall Jones.

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The views expressed in this report are those of the author and do not necessarily represent those of the Japan Economic Institute.

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